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ABSTRACT

This paper identifies five difficulties in teaching the analysis of social problems, and proffers "mind maps," a concept that refers to the ways in which students create a visual representation of their thinking patterns, as a possible solution. In constructing mind maps, especially for a Social Problems course, the following four steps are recommended: (1) preparation--students must do background reading and research on a social problem of interest to them; (2) brainstorming-students write down all the causes and consequences related to the social problem they've chosen to investigate, then identify the ones central to their topic; (3) revision-students revise their initial drafts and continue to gather data; and (4) presentation-students present their mind maps to others for understanding and evaluation. Some of the benefits of mind maps are that they require active learning, improve memory and learning skills, encourage creative thinking and problem-solving, and honor different learning styles. This paper presents the results of using mind maps at Columbus State Community College, as well as several mind map projects. (Contains 15 references.) (EMH)

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USING MIND MAPS TO TEACH SOCIAL PROBLEMS ANALYSIS

presented

August 20, 1998

at the 48th Annual Meeting of

The Society for the Study of Social Problems

by

Anne R. Peterson, Ph.D and Paula J. Snyder, Ph.D

Columbus State Community College

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Society for the Study of Social Problems
Session #2 - August 20, 1998

USING MIND MAPS TO TEACH SOCIAL PROBLEMS ANALYSIS

The Challenges of Teaching the Social Problems Course

Most of us who teach Social Problems would probably agree that teaching about the problems of society is difficult to do. We believe that there are a variety of reasons for this, and they seem to be as follows:

(1) **Social problems are complex social phenomena that involve many causes and consequences.** This fact makes it quite challenging to help students appreciate that there is no "quick fix" for the various social problems that are covered in a typical quarter-long or semester-long course. To truly appreciate and understand social problems, students must be made aware of their complexity. Furthermore, many social problems are related to one another and have common causes and consequences, and possibly could benefit from common solutions. However, the current approach to teaching social problems, as well as the typical textbook treatment of them, tends to "chop up" the social problem spectrum into ten to fifteen separate problem areas which are each treated as if they existed alone. Thus, students tend to view social problems as separate entities and do not see the "big picture" of social problems clusters.

(2) **Social problems involve topics and situations that many college students find depressing and overwhelming to study.** At our college, we often joke that the Social Problems course represents "one darned thing after another" which is one way that we instructors have of maintaining our own positive outlook and optimism about socially problematic situations. The reality for students, however, is that they frequently feel overwhelmed by the amount of human suffering that each social problem represents. Many "turn off" and content themselves with memorizing descriptive aspects of social problems in order to complete the objective-type, machine scored tests that they have grown used to. We often find that students say "What's the point in studying all these problems? Nothing can be done about them anyway!" Or, more recently, student attitudes have shifted from one of compassion and interest in helping those involved in social problems to stereotyping those involved as social "losers" who simply need to wake up and take charge of their lives -- or pay the penalty for their own "laziness" or inappropriate life choices. Many studies of today's traditional age college students reveal that they are quite pragmatic and impatient with those who don't "pull their own weight". Many are also opposed to government programs and social policies that imply more taxes that they will pay but not necessarily benefit from. Today's college teachers must face the fact that the idealistic days of the 1960's are gone. The attitudes and outlooks of students in the Social Problems course often makes this painfully clear.

(3) **Social problems textbooks present abstract ways of thinking about social problems that confuse and annoy students who seek more pragmatic approaches to the study of social problems.** Although some students are interested in obtaining descriptive information about the various social problems, few find it useful or easy to understand the value of the various theoretical perspectives that are typically presented in social problems texts. Once again, the pragmatism of today's students makes them impatient with efforts to help them understand how different sociologists view the various social problems. They could care less! Their concern is: What can be done? What has been done to "solve" this social problem? It is not surprising that the most popular and widely used textbooks in the field (Eitzen and Zinn) takes a strong social conflict approach to social problems and implies clearcut solutions to them. Students find it hard to tolerate the ambiguity of understanding that social problems are viewed differently by different groups of people. They often say: "What difference does it make if a functionalist sees things this way or a conflict theorist sees things that way? They both agree that something needs to be done; so, let's get on with it!" It has been our experience that today's students are looking for tools to help them solve their own and other people's problems.

(4) **Social problems require an understanding of social science research methodology and theory that many beginning students do not possess.** Although in many colleges, students typically take the Social

Problems course after their Introduction to Sociology course, in our college (which is a two-year, publicly funded community college) the Social Problems Course is taught as an introductory, stand-alone course. As a result, many students come to the course without an appreciation of the potential that social science research offers to "solve" or ameliorate social problems. Furthermore, many lack the skills needed to be effective students of social problems. They find it hard to research the causes and consequences of social problems. They find it difficult to summarize and apply the research they are able to obtain, and they find it difficult to express in either written or spoken form ideas that they might have about how socially problematic situations could be improved. While this may represent a situation unique to our particular college, it has been our experience that students who have had the Intro course -- and even other social science courses -- still need skills development. Thus, we feel that our experiences are likely to have a wider application that makes mind mapping a good learning tool in most college situations.

(5) Finally, at our college, **the Social Problems course has been additionally challenged with learning goals and objectives that make it even more difficult to design and teach.** In 1987, our college was transformed from a two-year technical college to a two-year community and technical college. The Associate of Arts and Associate of Science programs were added to existing Associate of Applied Technology degrees. When that occurred, the Social and Behavioral

Sciences Department was asked to create several interdisciplinary social science courses which would appear in our curriculum for the A.A. and A.S. degrees. Social Problems was designated as one of these courses. Thus, a person completing a degree at what is now Columbus State Community College, is required to take one interdisciplinary social science course for a technical degree or three interdisciplinary social science courses for the associate degree. In part, this was done to solve a perceived social problem of higher education: the generally poor ability of students in the 1980s to make connections between one subject matter field and another. However, in practice it has made it necessary for us to design a course that includes not only sociology, but psychology, anthropology, political science, and economics as part of the approach to studying social problems.

After the college installed its associate degree curriculum, an elaborate assessment effort was undertaken. The result of that was to create a series of General Education Outcomes which represent agreed upon skills and outlooks that every graduating student is supposed to exhibit. A copy of these outcomes are included in the Appendix to this paper. What these imply is that the interdisciplinary courses (of which Social Problems is one) must also strive to help students master the General Education Outcomes. This means that course activities and assignments must help students think critically, solve problems, communicate effectively, demonstrate interpersonal skills,

recognize the value of human diversity, and demonstrate life management skills. In the Arts and Sciences degree programs, these six broad general education outcomes are assessed in a final Capstone Course where students are expected to present portfolio evidence of their growth as college students and to complete a series of content, attitude, and skill assessment instruments. Thus, the general education outcomes cannot be ignored, since student college success and graduation requirements depend on the mastery of these.

As a result of these college policies, planning the Social Problems course has involved attempting to overcome some of the ordinary obstacles to teaching the course, along with including interdisciplinary content with skill and attitude experiences in keeping with the college's general education outcomes. This has proven to be a tall order, to say the least!

Thus, from the first, those of us who teach the social problems course at Columbus State have had to take a non-traditional approach. One aspect of that search for new approaches has been the use of mind maps to help students conceptualize various social problems.

What Are Mind Maps and Why Are They Useful?

Mind maps are called a variety of things: mental maps, concept maps, clusters, concept clusters, concept diagrams, webs, and even art maps

to name just a few words and phrases that mean essentially the same thing. Each of these terms refers to ways that students create a visual representation of their thinking patterns. A bibliography of various books about the process of mind mapping appears at the end of this paper for those who wish to read more about the theoretical justifications for this teaching/learning technique.

Essentially, those who use and recommend mind maps cite the following justifications for their use: mind maps (1) require active, rather than passive learning; (2) utilize full cognitive ability; (3) help to improve memory and the learning skills of students; (4) promote creative thinking by helping students generate ideas, see logical associations, and view issues from a holistic perspective; (5) facilitate problem-solving; (6) enable the sharing of ideas; (7) serve as evaluation tools; and (8) honor different learning styles.

Active learning. The process of transforming internal ideas and knowledge into a visual representation is not easy. Students generally have to work hard to do this. As a result, if they are willing to put forth the effort, they become much more involved in the learning process. Shone makes this point quite clearly: "The very act of constructing mental maps brings to bear your attention and concentration (113)." Novak (1998) argues that all learning requires motivation and involvement. Successful teachers must begin by motivating their students. He argues that a great deal of what goes on

at all levels of education today involves "rote learning" or the simple memorization of facts and figures. This type of learning is not involving. Instead, students need to be provoked to engage in meaningful learning which is the sort that concept mapping (his term for mind maps) helps to promote. Thus he argues that requiring students to visually manifest their thinking is profoundly challenging and requires a great deal of involvement in the learning process. He states: "...meaningful learning must underlie the constructive integration of thinking, feeling, and acting if learners are to be successful and achieve a sense of empowerment -- and also a sense of commitment and responsibility (Novak, 113)." Novak's outlooks are echoed by others who write about mind mapping. Buzan and Buzan note that mind mapping promotes "deep" i.e., internally motivated vs. "surface" or externally motivated learning (Buzan and Buzan, 228). The brain researcher Russell writes: "The more you consciously attend to something, the greater will be the depth of processing. The greater the depth of processing, the more meaningful the material becomes" (105).

Use of full cognitive ability. Interest in alternative ways of teaching and learning was sparked by the discoveries of Roger Sperry and his associates in the early 1960s. Sperry worked with epileptics and pioneered a radical form of surgery that literally "split" one half of the brain from the other. This would end debilitating seizures, but patients emerging from the surgery would similarly have

their cognitive abilities "split". For example, they could perceive objects in their environment, but could not always name them with spoken words. These discoveries opened the way to defining "right" and "left" brain capacities.

Most people who are right handed do their thinking on the left side of the brain. This is also where speech capacity is located. The left side of the brain is now seen as the place where words, logic, reason, mathematical calculations, and other thinking abilities associated with school success reside. The right side of the brain, by contrast, sees images, patterns, similarities, symbols, rhythms, generalities, and wholes. In fact, neither side of the brain is "better" or "worse" than the other; and, in daily life, both sides of the brain are used together, but this research has led to the recognition that much of what people experience in school is "left brained". Right brain oriented activities are not as common. Since mind mapping requires visual images and symbolism as well as the recognition of patterns and similarities as an individual creates a drawing, those who advocate this form of activity note that it uses the "whole" brain and promotes thinking that students do not often have an opportunity to use.

Thus, Buzan, Novak, Rico, Shone, Wycoff and others who have written about mind mapping celebrate its effect on the total thinking capacity of students. Tony Buzan, for example, an English social scientist interested in brain research and creativity, has actually registered

the name "mind map" as the official process of his organization. He advocates using them in a variety of situations and has formulated a technique that relies on "radiant" thinking i.e., beginning with a central idea and associating outward from that idea as the essential learning activity of the whole brain. Buzan has been very influential in promoting the use of mind maps in both school and business situations. While we have called the visual representations in our Social Problems course "mind maps," we have not structured them in exactly the same way that Tony Buzan and his followers recommend, although we do feel that his ideas are useful and have helped us understand the process of visual representation more fully.

Improved memory and learning skills. Many who write about mind mapping note the way that it promotes memory and thus "fixes" learned material. Wycoff writes: "....mind mapping requires an involvement with the material which naturally creates strong memory patterns. It creates images, allows you to organize the material as it is received, makes associations, and connects with material from other sources (18)." Buzan, Novak, Rico, Russell, and Shone all point out that the economical way that mind maps summarize information into visual symbols helps individuals remember that information. As Shone points out: "The most obvious feature of the mental map is that it can be pictured in the mind's eye (113)." Novak distinguishes between explicit knowledge which a person can easily show and explain to others and tacit knowledge which has been acquired through experience.

Once a person transforms tacit knowledge into explicit knowledge, he or she is not only better able to remember it, but able to share it with others (Novak, 100).

The person who has an expanded range of remembered images and concepts is also better able to learn. Novak (mentioned previously) has noted that the process of devising a mind map literally teaches a person how he or she learns at the same time that new information is incorporated. As students master concepts in a field of study, they are able to create associations more quickly with new information. Thus, they learn more rapidly, feel greater success, and become "empowered" as students. By helping students "see" how learning takes place, they can become better learners. Other researchers have noted the "ripple effect" of metacognitive strategies like mind mapping. Buzan and Buzan note: "Mind mapping reawakens [the] exceptional visualizing capacity [of the brain]. When the brain develops its ability to image, so it develops its thinking capacity, its perceptual abilities, its memory, its creativity, and its confidence (74)." They go on to argue that the ability to learn how to learn (which is promoted by their version of mind mapping) is probably the most important thing that an individual in our time can master. They quote the futurist Alvin Toffler, who states in his book Power Shift: "The illiterate of the future will no longer be the individual who cannot read. It will be the person who does not know how to learn how to learn (292)."

Enhanced creative thinking. Probably the most cited rationale for the use of the mind maps is the fact that they are useful in promoting all aspects of creative thinking: the generation of ideas, the ability to see patterns and relationships among ideas, and the ability to organize a set of ideas into a unified and meaningful whole. Buzan and Buzan note: "The mind map is in fact a sophisticated and elegant external manifestation of all of these defined categories [of creativity]: it is an external manifestation of the complete creative thinking process (155)."

Gabriele Rico uses "clustering," the visualizing technique she has devised, to help students formulate their ideas for writing. She believes that students can begin by jotting down their ideas in a quick, personal brain storming mode as a prelude to organizing what they want to write. In her view, clustering helps to eliminate writer's block and generate ideas (Rico, 18). She believes that without this first step, the creative process will not begin.

Once ideas have been generated, they need to be organized and associated with one another to continue the creative process. Buzan and Buzan recommend that people constructing mind maps step away from them for a period of time before they attempt to complete them. When they return to their visualization, they can examine their initial pattern of thought which should lead to seeing associations,

similarities, and linkages. Ideas can then be grouped together and extended. Wycoff notes that this is the essence of creativity. "Creativity is seeing things that everyone around us sees while making connections that no one else has made (21)." White and Gunstone believe that mind mapping actually promotes divergent thinking. They believe that people should deliberately try to link apparently different ideas and concepts. "By selecting widely separated (but connected) terms, you can promote divergent thinking. This is particularly useful for bridging traditionally separate subjects such as politics and technology (40)." Shone takes this further and emphasizes the way that mind mapping helps to clarify and order goals and plans of action (119-120). Thus, the process of working to make sense out of ideas and ordering those ideas in a visually meaningful way forces a person to see relationships and to understand how partial ideas or partial concepts are related to a larger whole.

Finally, the process of constructing a mind map enables a person to see an issue or set of related ideas as a whole. A mind map is a finished representation of a whole complex of ideas. Rico notes that after ideas are generated and organized a "shift" takes place that involves perceiving an entire pattern (89-90). She argues that this process represents the "design mind" at work (48). Rothenberg argues that this process of seeing the whole represents an "emotional need [for] finding order in nature" which he believes underlies the creative impulse of the scientist (128). Wycoff labels this process

simply "finding focus" (67). In every case, according to various advocates of mind mapping, the net result of organizing and arranging ideas on a mind map is to experience integration and perception of the whole. This, in turn, leads to the ability to clearly see an issue and understand its elements and structure.

Enhanced problem-solving. By helping students view the complexity of a social problem as a whole, the process of mind mapping helps them understand its causes and consequences as well as its relationships to other social problems. When that occurs, the stage is set for solving the problem. Rothenberg believes that this is the essence of scientific inquiry: "...once a crucial problem is clearly and fully defined, methods can be found to solve it (113)." Novak notes that problem solving is creative, a mark of "successful intelligence" which he contrasts with "inert intelligence" that may involve a great deal of information that is never applied to real life situations. He believes that concept mapping helps to promote the more valuable form of problem-solving intelligence (78). Later, although he is not a sociologist concerned with social problems, Novak goes on to argue that concept maps and other tools for visualizing can help us solve the problems of society by providing a framework for analysis and problem-solving (202-6). Thus, mind mapping provides a tool for both the analysis and synthesis of problems, including social problems.

The sharing of ideas. Once a mind map has been constructed, other

people can examine it and see and understand how another person may conceptualize a set of ideas in a way that is either similar to their thinking or quite different. Mind maps can thus become a basis for group work and group consensus building (Buzan and Buzan, Marguulies, Novak, and Wycoff). Furthermore, groups can work together constructing mind maps. Several business firms have used the mind mapping techniques of Tony Buzan and others to help them clarify their planning process and clarify their goals.

An evaluation tool. Another benefit of mind mapping is that it makes a person's thinking "public" and observable. A college instructor can "see" how a student is understanding a particular issue and can quickly spot flaws in logic or limited conceptualization. Mind maps can be used to determine what a person already knows or how that person's thinking is progressing (Novak, 38-40; White and Gunstone, 30-36).

Meeting the needs of different learning styles. Finally, the process of mind mapping offers options to students who lack or are working on their writing and verbal expressive skills. It also offers an alternative to the more traditional ways of teaching and learning that some students find difficult to master. The research on the brain hemispheres has also increased an appreciation for the way that different people learn differently. As a more active, visual form of learning and self-expression, mind mapping permits people with

different learning styles an alternative way of thinking and expressing their ideas.

Thus, the relatively simple technique of mind mapping offers a variety of positive benefits to those teaching a Social Problems course.

Using Mind Maps in the Social Problems Course

In the Social Problems course that we teach at Columbus State Community College, students are asked to complete three mind maps: one that shows the causes of a social problem of their choice; one that shows the consequences of the same social problem; and one that shows possible solutions to one cause and one consequence to the social problem they have identified. Furthermore, since our course is interdisciplinary, students must show at least one psychological cause, one social cause, one cultural cause, one political causes, and one economic cause; and, similarly, one psychological consequence, one social consequence, one cultural consequence, one political consequence, and one economic consequence to the problem they have chosen. As they formulate their solutions, they are asked to identify a psychological solution, a social solution, a cultural solution, a political solution, an economic solution and so on. The final requirement of the assignment is that each person, either by himself or herself, or working with others who have chosen the same problem, present their maps to the class and describe the solutions they have

found. Thus, the mind map assignment forces students to conceptualize social problems as a whole and to think about them in interdisciplinary terms. By requiring a presentation, students make their ideas public and focus on solving social problems, rather than merely describing them.

[A copy of the Mind Map assignment used at Columbus State appears in the Appendix to this paper.]

Constructing Mind Maps

Different authors have different ideas about the way that a mind map should be created. Generally speaking, they recommend the following four steps: preparation, brain storming, revision, and presentation.

Preparation. Mind maps cannot be created in a vacuum. In order to construct a good map in a Social Problems course, students must do background reading on the social problem of interest to them. We recommend that students begin by reading their textbook chapter on the problem they have chosen. Then, they are advised to go to the college library and look for further resources. Our college participates in a library system (Ohio Link) that allows students with valid ID's to borrow books from colleges and universities across the state. We also have Internet access to journals and general information that students

can use. Thus, the beginning of a mind map is the same as the beginning of a classic research project.

Brainstorming. Students are then asked to sit with a blank sheet of paper with their problem listed in the center. They can take 5 separate sheets of paper and label each one with a category of cause. They should then sit down and begin to brain storm all the causes of the social problem they can think of. For the second map, they are to identify all the consequences of the problem they have chosen. The third map asks students to identify the one cause and the one consequence that they believe is central to their problem. Each of these maps requires a period of intense brainstorming, drawing quickly on their paper, jotting down ideas as they occur, adding appropriate symbolism, colors, shapes, and so on. Then, the maps should be set aside for a time as students think about their contents.

Revision. After the initial draft is complete, students should return to the maps to revise them. They should note overlapping ideas, draw arrows to link related concepts, and rearrange items that don't appear to fit together. Each of the three required maps must consolidate a great deal of data. If, for example, for the first map students drew five separate maps for the five categories of cause, these must be consolidated into one unified final map. The revision process often sparks new ideas and recalls items that were forgotten. Under ideal circumstances, it enables students to create a final, well drawn and

neat visualization.

Presentation. The final part of a mind map is to present it to others for understanding and evaluation. In our project, students are asked to write a short paper that describes why they constructed the map that they did. A mind map should actually "stand alone" and not require extensive verbal explanations, but, often, the paper allows the reader to understand the way that the student approached the problem and understands it when the map itself is of poor quality or demonstrates confused thinking. At the end of the course, students present all of their maps, with an emphasis on the solutions to the problem that they undertook to study. Some students dislike making presentations. These are given the option of working with others in a group presentation. Sometimes the groups will pool their maps. At other times, the group will create an entirely new set of maps that summarizes the thinking of each member. In any event, mind maps must be shared and evaluated in some manner. Maps which are incomplete or poorly thought out are returned, and the student is asked to re-draw them.

The Results of Using Mind Maps in the Social Problems Course

We have found that there are both positive and negative aspects to the use of mind maps in the Social Problems Course.

Positive Outcomes. To begin with, we have found that the mind mapping assignments help to "solve" some of the challenges of teaching the Social Problems course that were listed at the beginning of this paper.

First, students must immediately confront the complexity and interrelated nature of social problems as they construct their maps. If they work to understand a particular social problem, it soon becomes apparent to them that the origins and impacts of the problem they have chosen -- and other social problems as well -- are quite varied. Also, it becomes apparent to students that their (possibly) stereotyped thinking about social problems and people who are involved in socially problematic situations may be inadequate. Quick fixes and pat answers don't work as easily when a broader conceptualization of a social problem is required.

Second, as students search for solutions to social problems, they come to appreciate that there are researchers, policy makers, public figures, and concerned citizens who have been at work on most of the social problems covered in a typical course. Furthermore, they often discover that real progress has been made in solving several of them. Students also realize where they need more information and where more research must be undertaken to help understand appropriate interventions. Thus, students have an opportunity to see social science as a science with the potential to obtain information in a

systematic way and use it to improve society. As social scientists, this is something that we would like beginning college students to appreciate.

Related to this benefit is the way that this assignment helps students realize that social problems can be solved and can be approached in such a way that individual aspects of them can be modified. This helps to keep the course much more upbeat and positive than it might otherwise be at the same time that it appeals to the pragmatic turn of mind of today's typical college student.

A third benefit of this assignment is that it removes the analysis and description of social problems from the realm of theoretical approaches and places it back into the world of social science variables which we strongly believe is a more reasonable and beneficial approach. The definition of psychological, social, cultural, political, and economic causes and consequences leads naturally to a recognition of social science variables and the possibility of operationalizing those variables in ways that make them meaningful. Students can literally "see" the independent, dependent, and intervening variables involved in a social problem. This learning is often hard to "tell" students about, but it represents the essence of what social scientists have to do as they fashion research undertakings and evaluate data that is available to them. Thus, the mind mapping assignment, coupled with the interdisciplinary focus of

the course, have helped students grasp the nuts and bolts of social science. While we recognize the importance of appreciating that a particular social scientist is a functionalist or conflict theorist or a feminist, etc., that understanding represents, in our view, a level of abstraction that can be gradually developed as a student pursues a degree in sociology or the social sciences. We would rather "hook" students on the potentials of social science as a basis for practical problem-solving than overwhelm them with theoretical perspectives which may not help them DO social science.

Fourth, because the mind mapping assignment does not involve the formality of a research paper and offers alternative modes of expression, many students who have had difficulty with more traditional ways of researching and writing about social problems can participate in the process of analyzing and solving them.

Finally, the mind mapping assignment has had the benefit of bringing together many of the teaching and learning goals that our college has added to the Social Problems Course. We are able to take an interdisciplinary perspective. The processes required in constructing maps promote critical thinking and problem solving. Students are required to communicate and share their thinking. They can appreciate different ways of thinking and diverse approaches to the same issue, and learn how to learn more effectively, which is one of the central life management skills identified as important by our college.

Negative Outcomes. As noted above, students who accept the assignment and work on it in good faith and with an open mind do very well with it. However, it is an unfamiliar type of assignment, and students need practice to understand what is expected and encouragement to persist with this way of thinking and conceptualizing. Some students refuse to do the assignment or make little effort to complete it well. Their poor quality maps are immediately evident and most likely reflect a generally low level of involvement in academic work. Some students who complain about the assignment later show why: they have poor thinking abilities and limited logic. One common error is to misuse arrows to demonstrate that a cause leads to an effect. But, by the same token, and, as mentioned above, there are also students who have a history of poor college performance who find this assignment liberating and empowering. They "get it" right away and spend a great deal of time producing original and high quality maps. This latter group is often the most exciting to work with.

Some students worry about their ability to draw or to use computer assisted drawing. We are usually able to reassure them. In fact, most students end up using basic drawing skills in the construction of their mind maps, and many are quite inventive with the use of color, shapes, symbols, magazine clippings or other artwork, and other devices to make their maps original and interesting.

Faculty who enjoy visual thinking and are willing to try new approaches to teaching and learning also generally enjoy the mind map assignment. Some of these have encouraged and received remarkable and complex mind maps and are enthusiastic about the process. Other faculty resist this approach and continue to prefer more traditional ways of teaching and evaluating learning in a social problems course. Sometimes, this latter group of instructors "comes around," but many cannot be encouraged to use this approach and do not include it in their courses. If it is practical, we try to not assign these faculty to the Social Problems course, but, when classes need to be covered and other options are not available, this resistant group has to be hired to teach. Many of them end up attracting the students who dislike and resist this type of assignment.

A special category of faculty concern at Columbus State has been the adjunct faculty who often teach at several different colleges and have created fairly standard and manageable courses that allow them to "ride the circuit" of college teaching in our area. This type of faculty often does not like the mind map assignment because it requires them to do something out of the ordinary that also takes more time to learn and explain to their students. While some of these faculty have become enthusiastic about mind mapping, others want nothing to do with it. Special training for these adjunct faculty coupled with the availability of mind map drawing resources in a computer lab may help to encourage them to participate.

Thus, we have to note that mind mapping is not for everyone -- whether students or faculty -- and cannot be universally required or applied unless people can see its value.

Suggestions for Including Mind Mapping in Your Social Problems Course

We would like to suggest the following steps to starting mind mapping at your college if you think it would be appropriate and acceptable in the Social Problems course that you teach

1. Start mind mapping yourself to see how it works. Several resources for creating mind maps are listed in the bibliography. See if this technique of organizing your thoughts works for you. Only if it does, try using it in one of your courses.

2. Begin using mind maps as group activities in a classroom. In our course, before the first mind map assignment is due, students are asked to construct several of them during group activities. As an example, at the beginning of the course, the class is divided into several groups and asked to define social problems and list several of them. Then, each group is given a sheet of overhead projector film and some pens and asked to "map" what they consider to be the most important causes of that problem. These are then shared with the rest of the class.

Thus, we recommend that an instructor try several situations in which students are asked to draw mind maps the causes or consequences of a social problem before committing to mind mapping as a course requirement.

3. Try the mind map assignment in one section of your classes. Do this to compare whether learning is enhanced by this assignment. See if your "mapping" class does better at understanding the material than a more conventional one. This could be evaluated by asking students in each type of class to briefly summarize what they learned about their social problem at the end of the course. The responses of those who used research papers could then be compared with the responses of the mind mappers to determine any differences in quality of understanding.

4. If you adopt the mind map assignment, provide a great deal of feedback. Show students maps that you think are well done. Share further information and advice about constructing good quality maps based on your own experiences and reading. Encourage them to be creative and have fun with the project at the same time that they study a particular social problem and its causes and consequences.

5. Find friends and allies in your department to share the mind

mapping experience with. This way, you can expand your understanding and insights and share positive and negative experiences. Who knows? The mapping experience may catch on at your college and make your social problems course -- and others -- much more productive to organize and teach!

Conclusion

The use of mind maps has proven an excellent way for us at Columbus State to not only teach the basic ideas of a social problems course, but help to promote critical thinking, problem solving, communication skills, and interpersonal skills. These visualizing devices also help students become more involved in their learning and become better learners.

The process of mind mapping requires preparation and patience. As a result, it is not something that every instructor may find useful. However, those that do so will provide their students with another approach to thinking and writing that will enable them to make a greater commitment to the Social Problems course.

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Appendices

- CSCC General Education Outcomes
- The Mind Map Assignment
- Mind Mapping Software

Columbus State Community College General Education Outcomes

01/10/94

1.0 Think Critically

1.1 Identify personal assumptions
1.2 Examine issues by identifying and challenging assumptions
1.3 Obtain information from a variety of sources
1.4 Analyze information
1.5 Evaluate issues from a variety of perspectives
1.6 Draw inferences
1.7 Compare and contrast information
1.8 Synthesize, integrate and connect information
1.9 Draw conclusions

2.0 Solve Problems

2.1 Recognize a problem
2.2 Define a problem
2.3 Analyze the problem
2.4 Consider alternative solutions or strategies
2.5 Utilize the appropriate methodology
2.6 Use human and technological resources effectively
2.7 Evaluate practical and ethical implications of the various solutions
2.8 Formulate an implementation plan
2.9 Establish criteria for determining degree of success

3.0 Communicate Effectively

3.1 Write clearly and effectively in standard English appropriate to the audience/ technology/purpose
3.2 Speak clearly and effectively in standard English appropriate to the audience/ technology/purpose
3.3 Listen actively with understanding
3.4 Read with comprehension at the two-year college level

4.0 Demonstrate Interpersonal Skills

4.1 Work collaboratively
4.2 Engage in group decision making
4.3 Recognize individual rights and responsibilities of group membership
4.4 Utilize conflict resolution strategies

5.0 Recognize the Value of Human Diversity

5.1 Recognize that humanity, by its nature, is diverse
5.2 Recognize that a basic component of human existence is that other traditions, cultures, lifestyles, and value systems exist apart from one's own
5.3 Recognize contributions of different cultures as well as one's own
5.4 Clarify one's own value system
5.5 Recognize the value of diverse creative/aesthetic expression and experiences
5.6 Recognize an interdisciplinary approach to knowledge

6.0 Demonstrate Life Management Skills

6.1 Value lifelong learning
6.2 Recognize the responsibility to balance individual needs with societal needs
6.3 Recognize human dependence upon the world environment
6.4 Evaluate career paths and opportunities
6.5 Understand the role of ethics in life and work

SS103 - The Mind Map Projects

THE MIND MAP PROJECT

Introduction

The papers for this course will be in the form of **mind maps** which are visual summaries of information that show cause, effect, and other relationships.

The Mind Map Project is also an attempt to help students understand some of the basics of social science by helping them identify key variables associated with different social problems. It requires students to actually diagram or draw the way that these variables interact with one another to create social problems. By making a representation of cause and effect, students will gain practice in clarifying their thinking about social problems at the same time that they will enable others to understand how they "see" the social problem that is of interest to them.

There are three mind maps. The first asks students to choose a problem that they want to understand more fully and work with for the entire quarter. Students can use their textbooks as a guide to doing this or they can discuss with their Instructor an appropriate and manageable problem to focus on. Once a problem has been chosen, students will be on their way to understanding that problem in terms of what social scientists believe cause it (independent variables); what the consequences (dependent variables) of the social problem are; and what might be done to modify or change the social elements associated with the social problem. Finally, Mind Map #3 asks students to choose one key independent variable and one key dependent variable and imagine how each of these could be changed (i.e., assumed as dependent variables) by a set of five independent variables (called solutions). At the end of the quarter, students will present the results of their work in the form of either individual or group presentations on the social problem they have chosen and its solutions.

As each person works through his or her social problem and carefully analyzes how that problem appears to originate and create other problems, it should become obvious how complex these social problems are and how difficult it can be to modify or change the human behavior associated with each. This is an important insight to acquire early in a social science career. Everyday, people propose "quick fixes" to the social problems we face. Once this course is concluded, those quick fixes should be less appealing and might even appear ridiculous as the full complexity of human social life begins to emerge. While this course may be just a first step in a social science career, the Mind Map Project should be a useful beginning to an understanding of how social scientists define what they will study and chart or map the consequences of variables that become of interest to them.

A Mind Map, at its best, needs very little explanation. It is a way of summarizing a great deal of information into an economical and clearly understandable form. Ideally, a mind map should stand alone

and completely summarize a series of ideas or concepts. Thus, each map should be so clear and understandable that anyone "reading" it will understand how the person who created it "sees" the problem.

As people work on these maps and share them with one another, it is our hope that they will gain greater understanding of how social scientists need to discuss and share their work in order to clarify their approach to studying various issues.

Although mind maps are personal and unique, they need to be based on solid research and the understanding of a particular social problem. Therefore, to begin this project, students will need to do some research in the social problems area they have chosen.

Mapping Social Science Variables

Social scientists are engaged in a process of systematically understanding the social world around them. Contrary to popular belief, it is possible to determine, in a scientific and systematic way, how people are likely to behave and what will cause them to change their behavior. In order to do this, social scientists have to carefully analyze social situations in order to determine the causes and consequences of the behavior that they observe. These causes and consequences are also called variables because they change and can be changed under various circumstances. There are 3 important types of variables. **Independent variables** are causes of things that happen in the social world. **Dependent variables** are consequences of things that happen in the social world.

Social problems include both of these types of variables. In some cases, a social problem like poverty, causes another social problem, like crime. In that case, poverty is the independent variable and crime is the dependent variable. However, crime can also cause other kinds of behavior. Thus, although crime is a consequence (a dependent variable), it is also a cause (independent variable) of such things as fear, purchasing of guns, further crime, increased policing, etc.

Variables can also be classified according to what they refer to. In the field of social problems, there are several different categories of variables. We will be looking at five of these: individual variables, social variables, cultural variables, political variables, and economic variables.

Individual variables refer to characteristics of an individual which may cause a social problem or become the consequence of a social problem. Such issues as personal emotions, personal perceptions, level of intelligence, level of skill, and so on are variables related to individuals. Often, people who are involved in social problems have personal qualities which predispose them to involvement in social problems. Recognizing and identifying the way that personal factors cause and result from social problems is an important course learning.

Social variables refer to the social experiences and influences that a

person has in his or her daily life. It includes the influences of family and friends, the impacts of social institutions like the school, the church, and the workplace. These involve all the ways that a person, by being involved with other people, is taught (or socialized) how to behave and how not to behave. Frequently, when attempting to account for social problems, analysts will point to problems of family life or schooling. It is important to recognize the way that social factors can influence, as well as be influenced by social problems.

Cultural variables are similar to social variables but move far beyond the direct social influence on the individual to looking at ways that an entire society's beliefs and values as well as its images and understandings are subtly transmitted to individuals and influence their behavior. American culture is complex and diverse. The media (television, movies and other entertainment, the music industry, etc.) transmits powerful cultural messages on a daily basis to people throughout the larger culture. Religion influences behavior and helps to form the values and beliefs of a society. Finally, people grow up in particular subcultures that are defined by language (e.g., Latinos), region of the country (e.g., the South), age (e.g., the "teen culture"), or social class (e.g., the middle class). Each of these subcultural experiences influences how an individual comes to see the world and what he or she recognizes as acceptable or "normal" behavior.

Cultural factors are both causes and consequences of social problems. For example, if individuals perceive that violence is widespread within a culture and apparently "out of control" that can influence them to utilize violence in their daily lives or to accept violence as "normal," something which "everybody" experiences. This culturally created outlook can make it difficult to convince people that something can be done to change the way things are.

Political variables refer to those factors associated with the organized state and its processes for electing officials, empowering individuals, creating issues, and otherwise exercising power and influence within the political institution. The political system can choose to pay attention to or ignore certain social problems. For example, it is ultimately a political decision whether a drug is designated legal or illegal; whether an action is criminal or acceptable; whether poverty is defined in terms of one income level or another. Politics can make individuals involved in social problems seem worthy of help and assistance or "undeserving" of public compassion and help. Political efforts are needed to raise money to fight social problems. Politicians decide whether or not to allocate funds to pay the salaries of police or to withhold funding from social service agencies that serve the needs of the poor. Thus, political factors must be considered as both causes and consequences of the social problems that exist.

Finally, economic variables are critical to understanding social problems. Often, social problems are associated with a lack of income

or a lack of a legitimate source of income. Economic variables refer to a variety of factors. One of these is the overall economy and how well it is performing. A strong economy helps to provide jobs and resources for people from all different social backgrounds and can eliminate many social problems. A weak economy with high unemployment is associated with people having reduced resources and limited options about how they will support themselves and their family. Having access to jobs and income are important social issues. Some business organizations limit access to certain jobs to people of a certain type. This can cause many social problems, but is also the result of other social problems in our society (e.g., discrimination, anti-female prejudice, anti-gay beliefs, etc.). Thus, economic factors are also critically involved in social problems in our society.

Constructing Mind Maps

There are four basic steps involved in constructing a mind map: preparation, brain storming, revision, and presentation.

Preparation. Mind maps cannot be created in a vacuum. In order to construct a good map in a Social Problems course, students must do background reading on the social problem of interest to them. A good place to begin is the textbook chapter on the problem you have chosen. Then, go to the college library (ERC - Collumbus Hall) and look for further resources. Our college participates in a library system (Ohio Link) that allows students with valid ID's to borrow books from colleges and universities across the state. We also have Internet access to journals and general information that students can use.

Brainstorming. The next step is to brainstorm ideas. A good method for doing this it to sit with a blank sheet of paper with your problem listed in the center. If you would like, take 5 separate sheets of paper and label each one with a category of cause. You can then begin to brain storm all the causes of the social problem you can think of. For the second map, identify all the consequences of the problem you have chosen. The third map asks you to identify the one cause and the one consequence that you believe is central to solving your problem. Each of these maps requires a period of intense brainstorming, jotting ideas quickly on paper, creating appropriate shapes and symbols, adding color and elaboration until a final map emerges. After the initial brain storming (about 7 minutes a map), set them aside for a time and think about what you have created.

Revision. After the initial draft is complete and some time has passed for reflection, return to the maps to revise them. Note overlapping ideas; draw arrows to link related concepts; and rearrange items that don't appear to fit together. Mind maps can be drawn in different colors and can contain words, symbols, cartoons, or other modes of illustration. Each of the three required maps must consolidate a great deal of information. If, for example, for the first map you have drawn five separate maps for the five categories of cause, these must be consolidated into one unified final map. The revision process often sparks new ideas and recalls items that were

forgotten. Under ideal circumstances, it will help you create a final, well drawn and neat visualization.

Presentation. The final part of a mind map is to present it to others for understanding and evaluation. In this series of projects, each student is asked to write a short paper that describes why he or she constructed the map that they did. A mind map should actually "stand alone" and not require extensive verbal explanations, but, often, the explanation paper allows others to understand the way that you approached the social problem and understand it. At the end of the course, each person must present all of his/her maps, with an emphasis on the solutions to the social problem studied. Since some students dislike making presentations, you are given the option of working with others in a group presentation. Sometimes the groups will pool their maps. At other times, the group will create an entirely new set of maps that summarizes the thinking of each member.

Good luck! Enjoy the process of understanding and communicating information that mind mapping offers!

SS103 - The Mind Map Projects

MIND MAP #1

Date Due: [Check your course syllabus for the date.]

Format: Neatly rendered, clearly labeled mind map + 1 - 3 neatly typewritten (double spaced) pages explaining the mind map.

Length: 2 - 4 pages (1 page of mind map + 500 words)

The first mind map requires students to choose a social problem that they want to work on for the entire quarter. To do this, consult the table of contents in the Mooney et al. book. Most major social problems are covered in the text. If none of these seems suitable, ask your instructor for assistance. If you have another idea for a social problem, be sure to ask your Instructor's permission to work on that problem.

For the first mind map, you will be working on defining the causes (or independent variables) of the social problem of interest to you. It is important for this project that you identify as complete a set of causes as you can. There are five basic categories of causes: (1) **individual behaviors** -- positive and negative -- that lead to the social problem; (2) **social structural factors** - the way that social groups influence individual behaviors. These can include friends, familiy, work groups and organizations, and social class factors; (3) **cultural values, outlooks and images** which surround individuals and influence their behavior; (4) **political factors** within a society that either help to solve or hinder the solution to social problems. These include the major political institutions of a society and how people relate to and participate within them; and (5) **economic factors** within a society that can add to and accentuate social problems. These include how many jobs are available and the kind of incomes and lifestyles people can achieve. This can also refer to the effects of the global economy on social problems within a particular society.

After you have chosen your social problem do the following:

(1) Research the social problem you have chosen. Begin with your textbook and then search for recent articles in journals and magazines or books that address the problem.

(2) When your initial research is complete, spend an hour or more brainstorming all of the possible individual, social, cultural, political, and economic causes that you can think of for the problem.

(3) Review your list and group the causes that you have identified. into the five categories listed above. You must have at least one (1) cause from each of the five areas noted above, but you are encouraged to identify as many as you can since these will

assist you with Map #3.

(4) Create a mind map that illustrates the causes of the social problem you have chosen.

Note: Some causes you have identified may be the result of other conditions. Be sure to keep this in mind as you create your map. A suggested format appears after this assignment for those who need some help visualizing what a mind map for this assignment might look like.

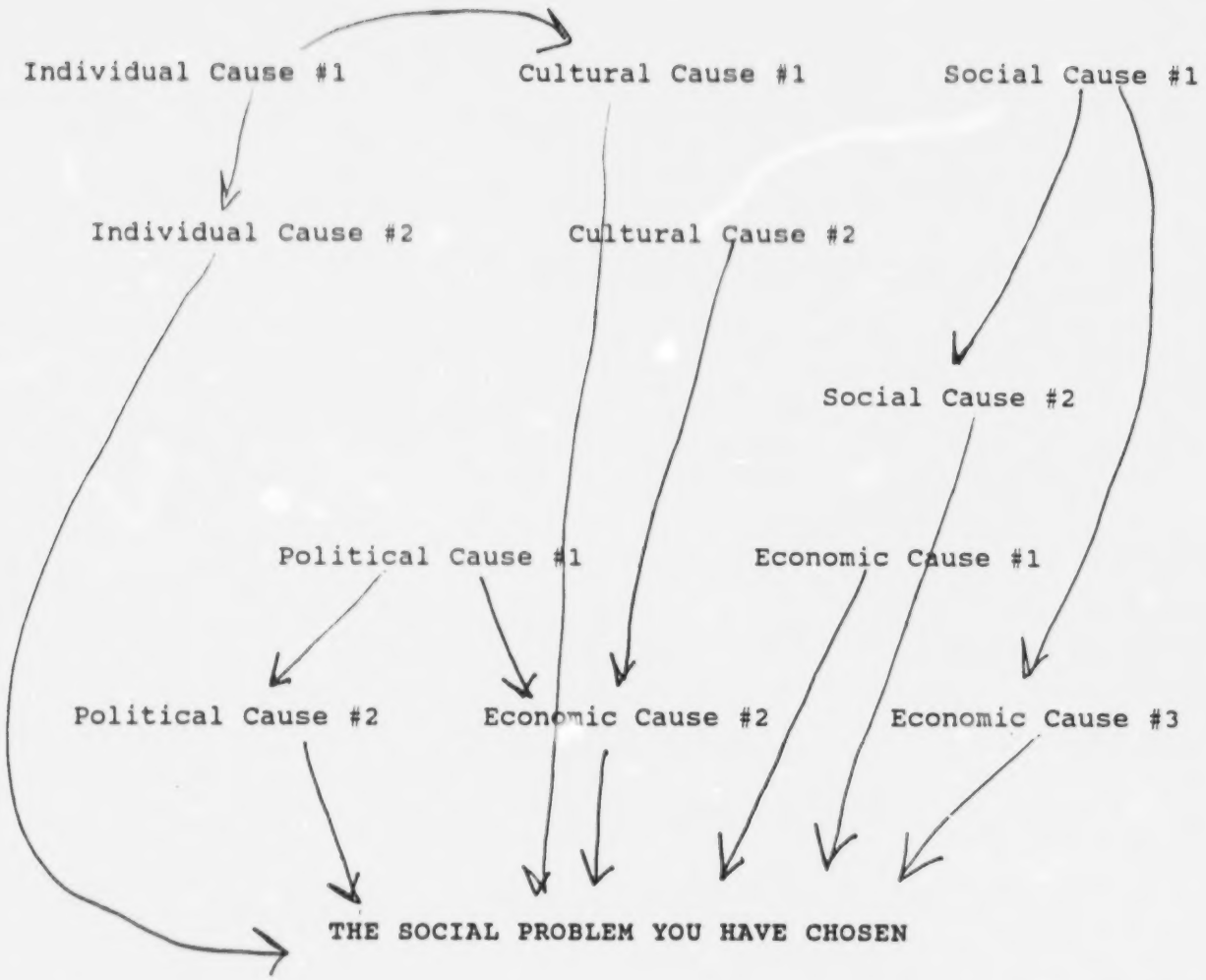
(5) Briefly describe the mind map illustration that you have created in a 500 word essay, explaining why it took the form it did.

The mind map/paper will be graded as follows:

Overall quality of the mind map (This refers to how complete, clear, complex, and comprehensive the map is.)	15 points
Originality/creativity of the map (This refers to its format, color coding, and other features.)	5 points
Content/accuracy of the paper	10 points
Total	30 points

SS103 - The Mind Map Projects

Sample Format for Mind Map #1



SS103 - The Mind Map Projects

MIND MAP #2

Date Due: [Check your course syllabus for the date.]

Format: Neatly rendered, clearly labeled mind map + 1 - 3 neatly typewritten (double spaced) pages explaining the mind map.

Length: 2 - 4 pages (1 page of mind map + 500 words)

In the first mind map for this course, students were asked to outline the causes of a social problem of their own choosing. This second mind map shows the consequences (or dependent variables) of that social problem. Once again, students are asked to consider five areas of consequence of the social problem that they have chosen. Social problems affect **individuals** in a variety of ways, causing them personal distress, changes in their outlook and personal behavior. Social problems affect the **social structure and organization of society** causing them to change in ways that can be identified and, in a course like this one, are termed "social problems." They affect the **culture** of a society, causing symbols within that culture to change and affecting key values and outlooks that people within a culture have. Social problems also affect the **political** outlooks and structures of a society, modifying them in ways that can be negative. Finally, social problems have **economic** consequences. They are expensive and interfere with the economic system of a society in some way.

To complete this assignment, you should do the following:

(1) Review your Mind Map #1 and the comments that your instructor made on it. It may be necessary for you to complete more research in order to create a high quality map. If so, begin there.

(2) Then, taking comments from your first map into consideration and adding new research insights, brain storm for an hour or more to identify the consequences of the social problem that you have chosen. You will probably discover that you considered several consequences of your social problem when you were preparing Mind Map #1.

(3) Review your list of consequences and group them into the five categories required: individual, cultural, social, political, and eocnomic. Be sure that you have at least one in each of these categories, but, once again, for the purpose of Mind Map #3, the more you have in each category, the easier it will be to complete the final map.

(4) Create a mind map that illustrates the consequences of the social problem you have chosen. **Recall:** Some consequences, as was the

case with causes in Map #1, may flow directly from the social problem or may be the consequence of another consequence. Be sure to keep this in mind as you complete your map.

[A suggested format appears below for those who need some help visualizing what a mind map for this assignment might look like.]

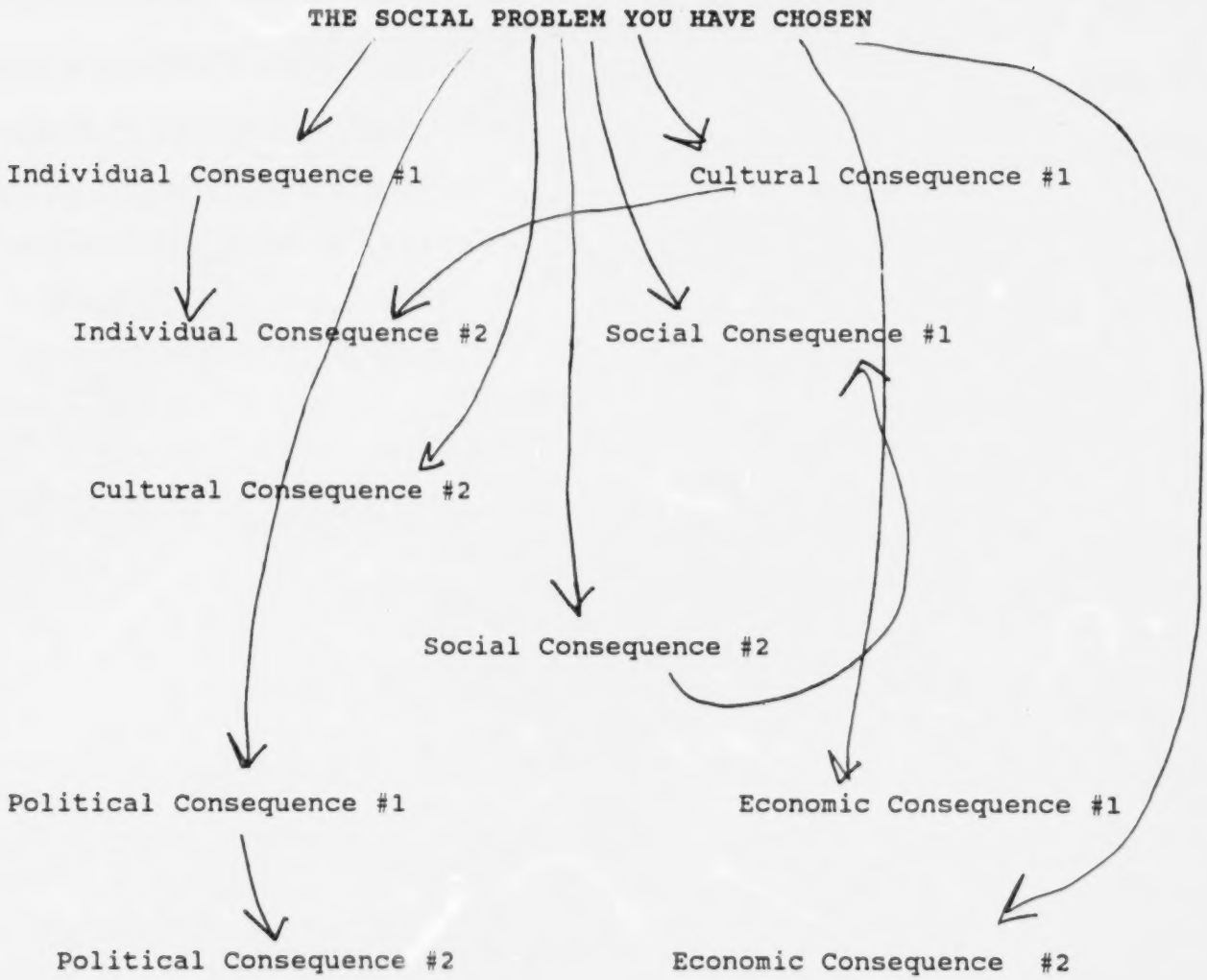
(5) Briefly describe the mind map illustration that you have created in a 500 word essay, explaining why it took the form it did.

The mind map/paper will be graded as follows:

Overall quality of the mind map (This refers to how complete, clear, complex, and comprehensive the map is.)	15 points
Originality/creativity of the map (This refers to its format, color coding, and other features.)	5 points
Content/accuracy of the paper	10 points
Total	30 points

SS103 - The Mind Map Projects

Sample format for Mind Map #2



SS103 - The Mind Map Projects

MIND MAP #3

Date Due: [Check your course syllabus for the date.]

Format: Neatly rendered, clearly labeled mind map + 1 - 3 neatly typewritten (double spaced) pages explaining the mind map.

Length: 2 - 4 pages (1 page of mind map + 500 words)

In the first mind map for this course, students were asked to outline the **causes** of a social problem they had chosen. In the second map, they outlined the **consequences** of their chosen social problem. In this final mind map for the course, students will make an effort to suggest ways to solve the social problem they have chosen by identifying ways that changes could be made in the behavior of individuals, the social structure of society, the content of culture, the political structure of society, and the economic structure of society.

To complete this assignment, you should do the following:

(1) Review the two previous mind maps which illustrate causes and consequences of the social problem they have chosen, including Instructor comments. If more research needs to be done to complete this project, now is the time to do it.

(2) Identify what you believe to be the most important cause of this social problem as well as the most important consequence of the problem identified. [These should have appeared on Maps #1 and #2!]

(3) Looking first of all at the **major cause** of the social problem you have chosen, brain storm all of the ways that this cause might be changed within American society today. Consider how individuals, the social organization of American society, the culture, the political system, and the economic system could be changed to eliminate this one major cause. Try to be as complete and extensive as you can. Then, choose one individual solution, one social solution, one cultural solution, one political solution, and one economi solution to the social problem. Obviously, the more solutions you can brainstorm, the better your final five choices will be. This will become the top part of Mind Map #3.

(4) Next, look at the **major consequence** of the social problem you have chosen and brain storm all of the ways that this consequence might be modified within American society today. Consider how modifications of individual behavior, the social organization of American society, the culture, the political system, and the economic system could be implemented to make the consequences of your social problem less problematic for American society as a

whole. Try to be as complete and extensive as you can. Once again, after creating a list of possible modifications, choose one best individual, social, cultural, political, and economic modification as a way of changing the major consequence you have identified. This will become the bottom part of Mind Map #3.

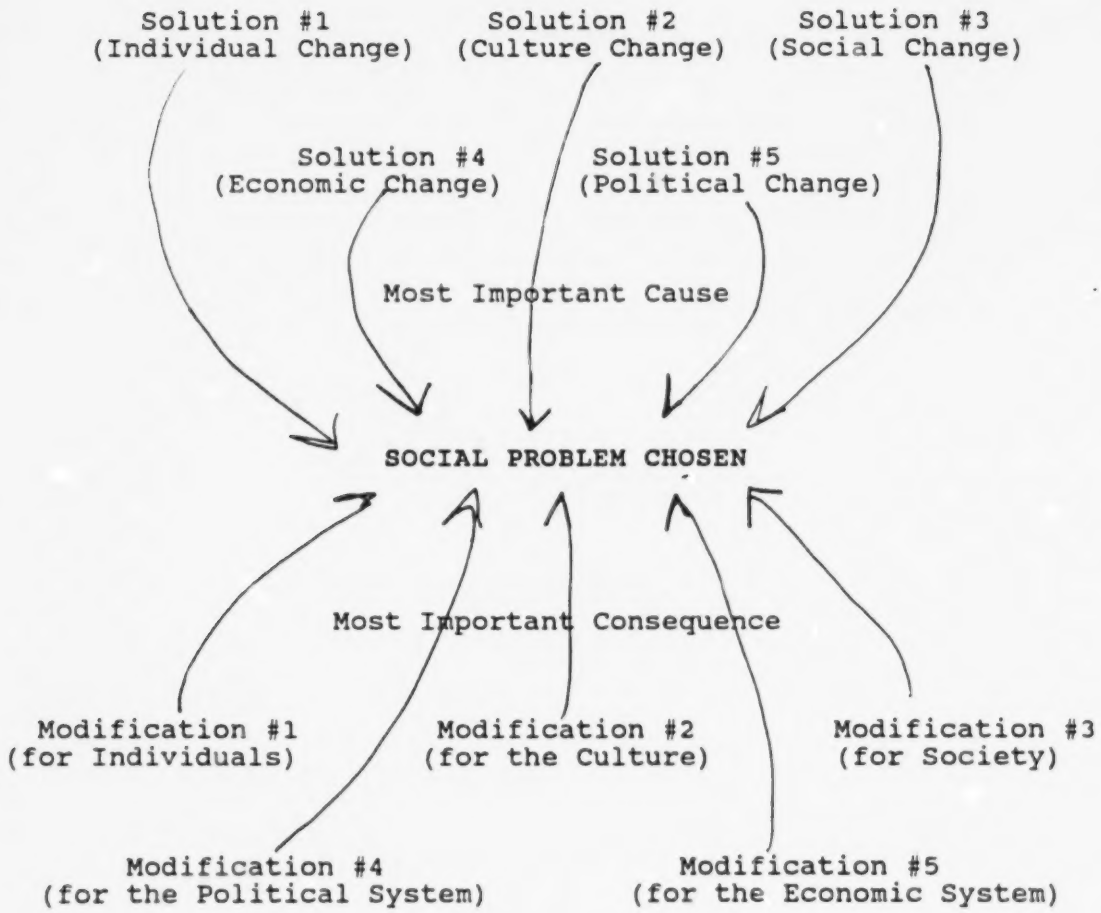
(5) Create a map that illustrates what you believe to be the best solutions to **BOTH** the major cause and the major consequence of the social problem you have chosen. Once again, a sample map appears below for those who need help with visualizing the final format.

(6) Briefly describe the mind map illustration that you have created in a 500 word essay, explaining why it took the form it did.

The mind map/paper will be graded as follows:

Overall quality of the mind map (This refers to how complete, clear, complex, and comprehensive the map is.)	15 points
Originality/creativity of the map (This refers to its format, color coding, and other features.)	5 points
Content/accuracy of the paper	10 points
Total	30 points

Sample Format for Mind Map #3



SS103 - The Mind Map Projects

MIND MAP PRESENTATION

This is the final part of the Mind Map Project. Presentations will take place during the final week of the quarter. A sign-up sheet will be distributed before that time.

Each student will present his/her chosen social problem mind maps to the class in a very brief five (5) minute presentation. There are two ways that this can be done. A student can make an individual presentation OR, students who chose the same social problem to work on can combine their efforts into one group presentation. In the latter case, the grade for the presentation will be a group grade with each person receiving the grade that the group received. In this latter case as well, students will work to create a combined set of mind maps for the presentation.

(NOTE: This presentation requires several visuals. These must be Mind Maps. While other visual material can be included, these cannot be substitutes for the Mind Maps!). The ERC will prepare overhead projector slides in their ground floor student assistance area. Please allow enough time for the production staff to make them, however. Posters can also be used as illustrations.

The presentation should include the following:

- A brief description of the social problem chosen
- The causes and consequences of the social problem (Maps #1 and #2)
- Possible solutions/modifications to the social problem (Map #3)

Grading will be as follows:

Quality/Organization of presentation (esp. including key elements)	15 points
Quality of visual(s)	10 points
Observing time limit	5 points
Total	30 points

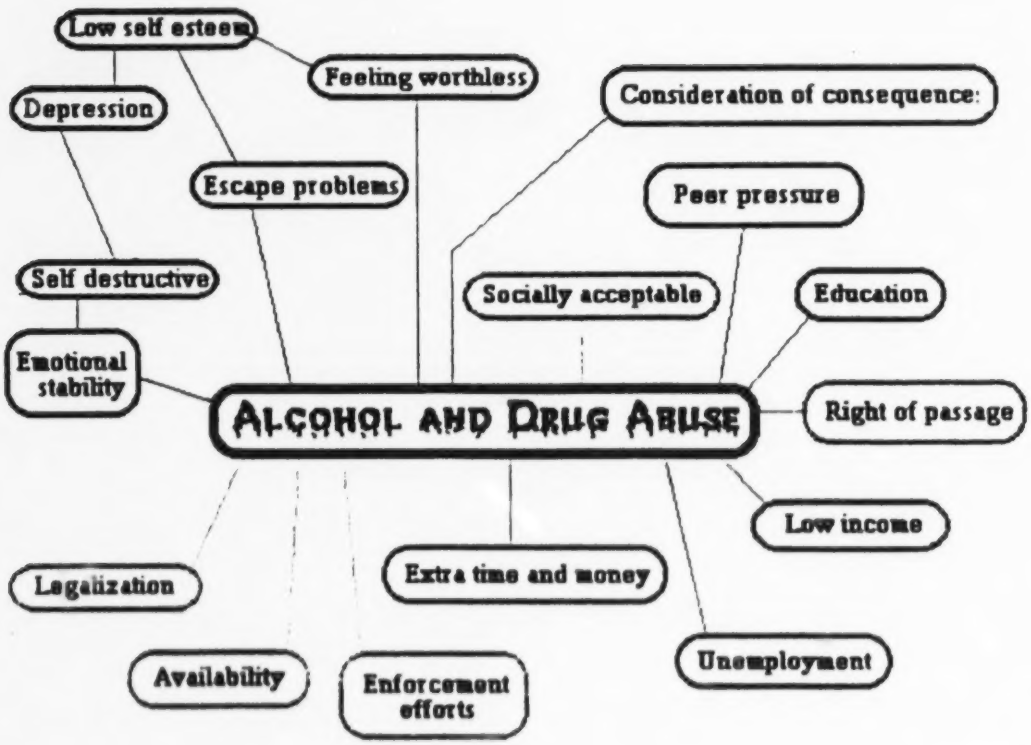
SS103 - The Mind Map Projects

SAMPLE MIND MAPS

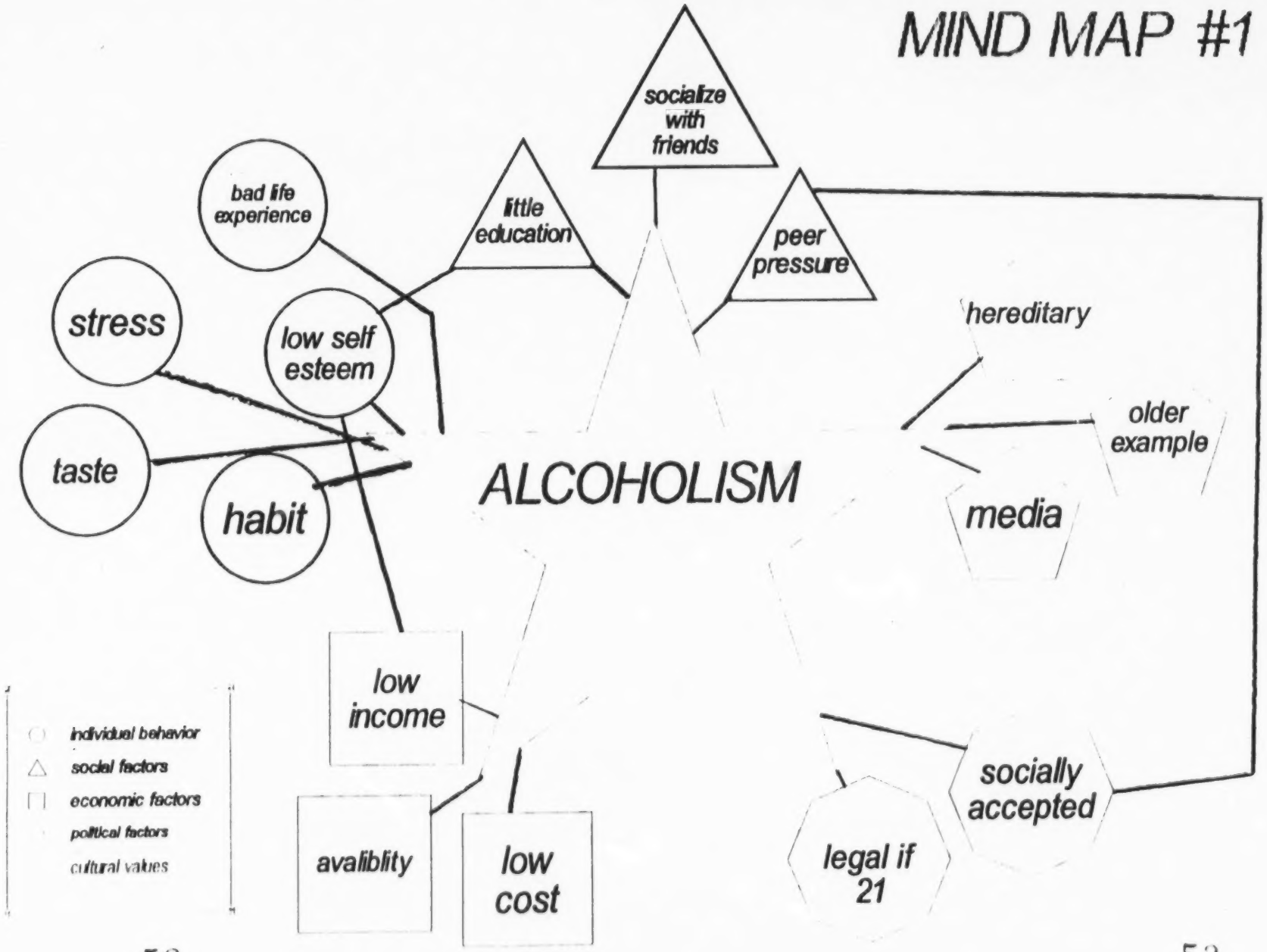
MAP #1

Legend

Blue: Individual factor
Gold: Cultural factor
Purple: Social factor
Green: Economic factor
Brown: Political factor



MIND MAP #1

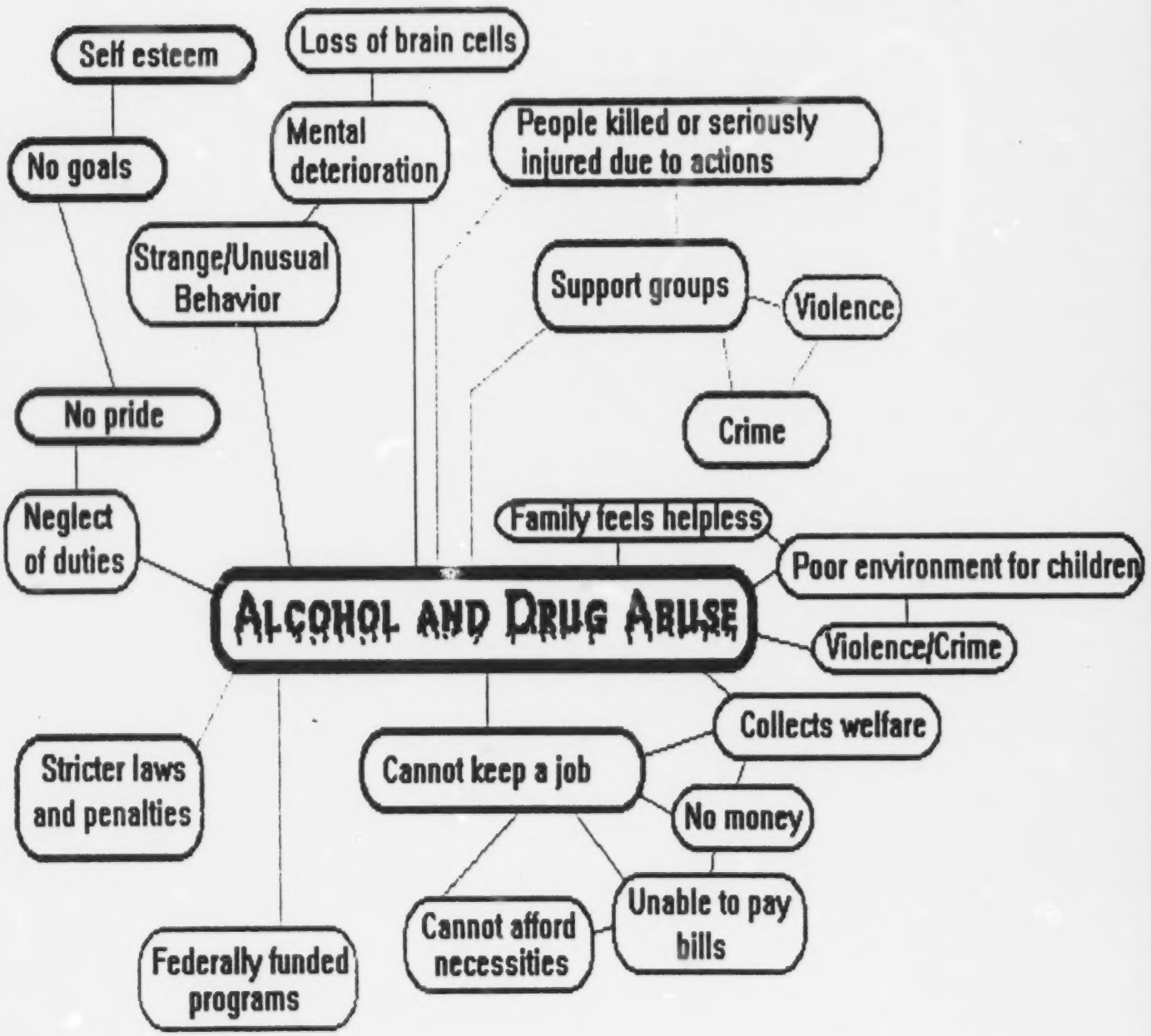

socialize with friends
bad life experience
little education
peer pressure
stress
low self esteem
hereditary
older example
taste
habit
ALCOHOLISM
media
low income
individual behavior
social factors
economic factors
political factors
cultural values
socially accepted
avaliblity
low cost
legal if 21

DISCRIMINATION
SKINHEADS
POVERTY
K.K.K. THE KLAN
FORCED INTEGRATION
RACISM
SLAVERY
ARROGANCE
SOCIAL CLASSES
MEDIA
SCAPEGOATING
SEGREGATION
CONTRIBUTING FACTORS
WHITES ONLY
COLOREDS ONLY
WATER
WATER

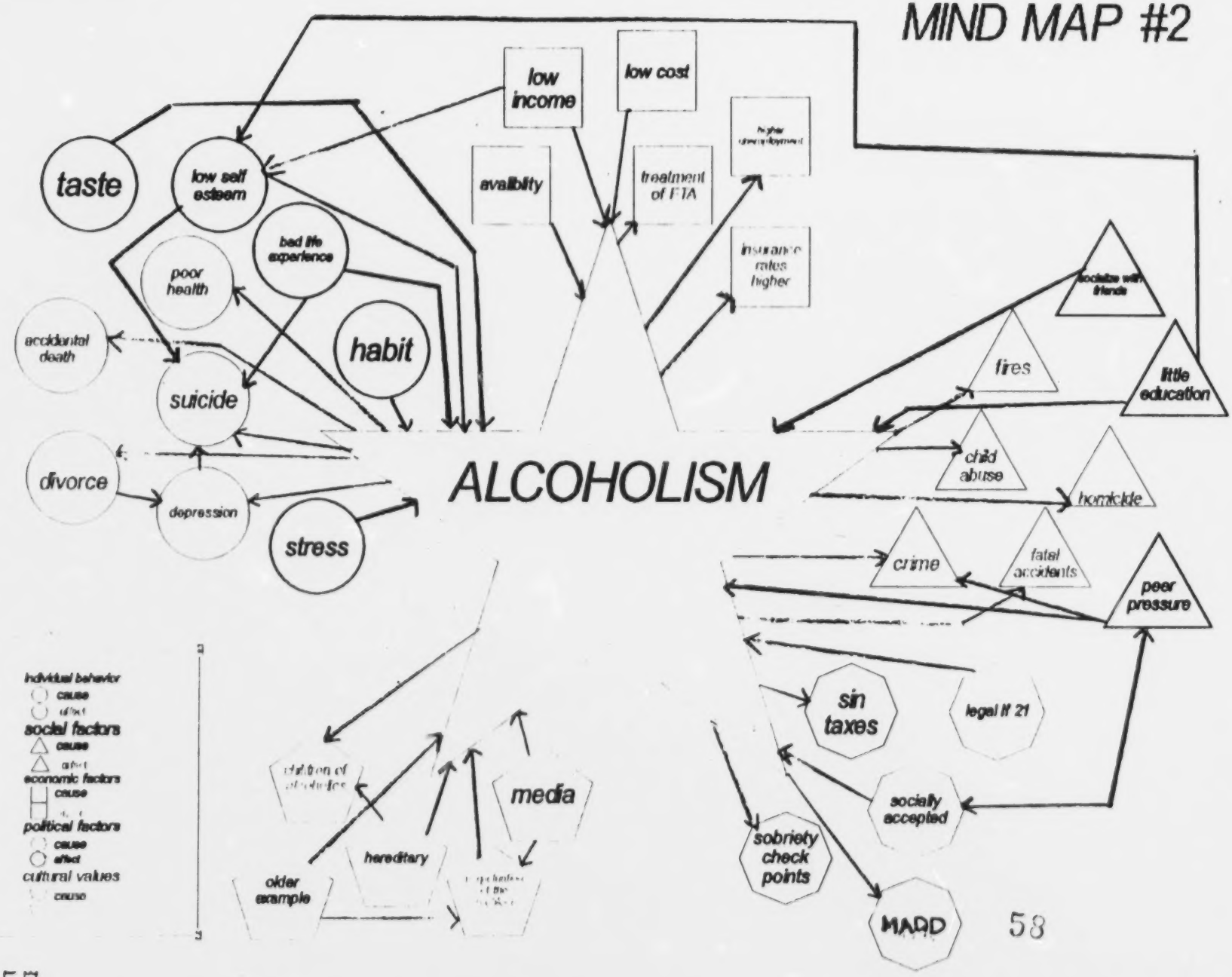
#1

Blue: Individual factor
Gold: Cultural factor
Purple: Social factor
Green: Economic factor
Brown: Political factor

MAP #2



MIND MAP #2


low income
low cost
taste
low self esteem
availbility
treatment of DTA
bad life experience
poor health
habit
accidental death
suicide
divorce
depression
stress
ALCOHOLISM
fires
little education
child abuse
homicide
crime
fatal accidents
peer pressure
sin taxes
legal if 21
socially accepted
sobriety check points
MADD
media
hereditary
older example
Individual behavior
cause
social factors
economic factors
political factors
cultural values

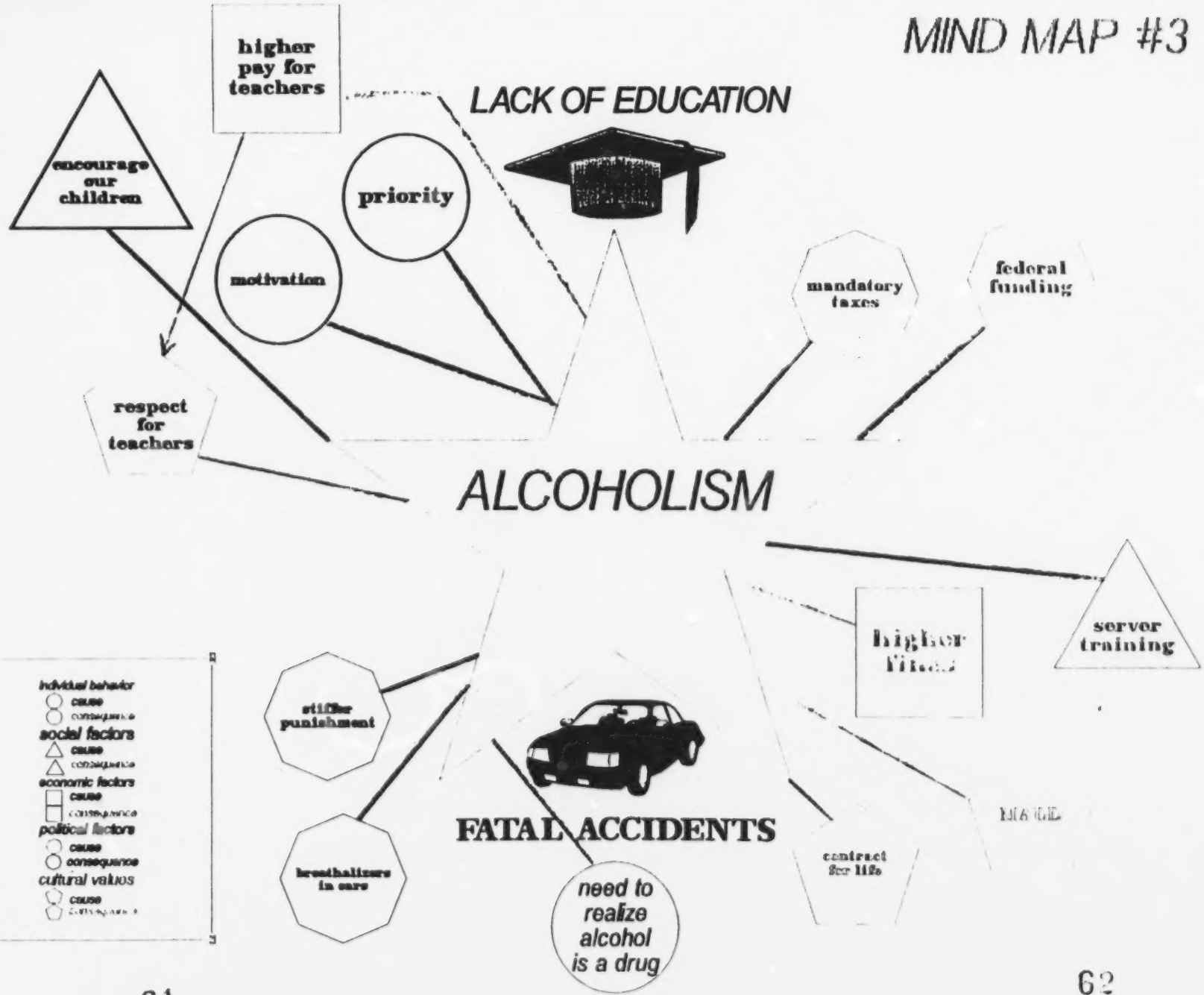
RACISM
RACIAL WAR IN AMERICA
POVERTY
VIOLENCE
DISCRIMINATION
DIVIDED AMERICA
OPPRESSION
PREJUDICE
LOWER WAGES FOR MINORITIES

#2

Build self esteem
Self help
Awareness and education
Assistance from peer groups
Better job oppurtunities
Escape Problems
Funding for various programs
DRUG AND ALCOHOL ABUSE
People are killed or seriously injured
Realize there is a problem
Educate and change ideas about alcohol and drug use
Changing your associations
Enforcement of current laws rather than creating new laws
Financial penalties for pain and suffering to the victims

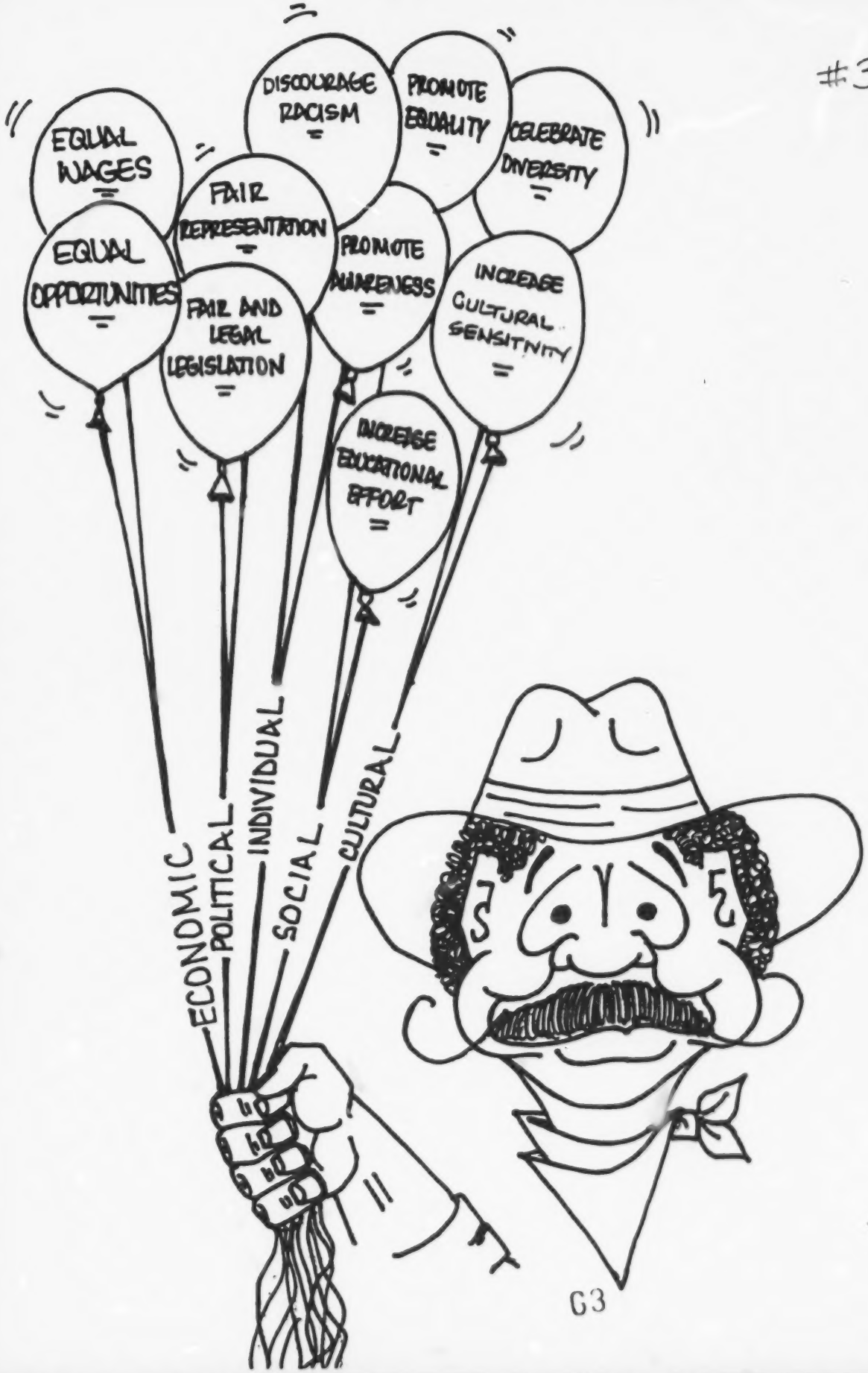
MAP #3

MIND MAP #3


higher pay for teachers
LACK OF EDUCATION
encourage our children
priority
motivation
mandatory taxes
federal funding
respect for teachers
ALCOHOLISM
server training
stiffer punishment
FATAL ACCIDENTS
breathalizers in cars
contract for life
need to realize alcohol is a drug
individual behavior
cause
consequence
social factors
cause
consequence
economic factors
cause
consequence
political factors
cause
consequence
cultural values
cause

#3

POSSIBLE SOLUTIONS



Mind Mapping Software

Inspiration for Windows 4.0
Inspiration Software, Inc.
2920 SW Dolph Court, Suite 3
Portland, OR 92719
Toll Free (800) 877-4292 (International and Local)
Fax: 503-246-4292

- Requires: 4MB RAM; Windows 3.1 or higher
- List Price: $129

Mind Man
Future Communications System, Inc
92 Summit Way, Syosset, NY 11791, U.S.A
Email: fcs@mindman.com
Orders: 1-800-563-7773 (USA), +1 516-496-7121 (other countries)
Fax: 516-496-7121

- Retail Price: MindMan 3.0 $189.00
  MindMan 3.0 student price $70.00

IdeaFisher for Windows 5.0
IdeaFisher Systems
2222 Martin St. #110
Irvine, CA 92715
800-289-4332; 714-474-8111
Fax: 714-757-2896

- Requires: 2MB RAM (4MB recommended); 5MB hard drive space; Windows 3.1 or higher
- List Price: $199
- Direct Price: $99

MindLink Problem Solver Corporate Edition 1.0
MindLink Software Corp.
247 Kings Highway
N. Pomfret, VT 05053-0247
800-253-18441 802-457-2025
Fax: 802-457-1108

- Requires: 4MB RAM (8MB recommended); 10MB hard drive space; Windows 3.1 or higher
- List Price: $299; upgrade from MindLink Problem Solver $79

Slides from Mind Map Presentation

SSSP - August 20, 1998

Mind Maps

- visual representations of patterns of thinking and conceptualization

- also called mental maps, concept maps, clusters, concept clusters, concept diagrams, webs, and art maps.

What do researchers say about the value of mind maps?

- This teaching/learning tool
  - promotes active learning
  - helps students use their full cognitive ability
  - improves memory and learning skills
  - enhances creative thinking
  - enhances problem solving ability
  - helps students share ideas
  - can be used as an evaluation tool
  - meets the needs of different learning styles.

At CSCC, we use mind map assignments to:

- Identify the
  - individual
  - social
  - cultural
  - political
  - economic
- **Causes, Consequences**, and **Solutions** to Social Problems

Steps in Constructing Mind Maps

- Preparation
- Brainstorming
- Revision
- Presentation

What are the positive outcomes of using Mind Maps?

- Help students appreciate that social problems are complex.
- Provides the insight that social problems can be analyzed and solved -- at least in part.
- Provides an interdisciplinary approach to the study of social problems.
- Builds an understanding of basic social science thinking, particularly the relationship of categories of variables to one another.
- Meets the general education objectives of our college.
- Provides a positive alternative to more traditional assignments.

What are the negative aspects of using the Mind Map project?

- It is unfamiliar to students and takes course time to teach and practice.
- Some students refuse to do the assignment or do it poorly.
- Some students worry about their ability to draw or use computer assisted drawing.
- Some faculty resist mind mapping and prefer more traditional approaches.
- Some adjunct faculty resent the extra time that mind mapping involves.

How to get started with Mind Mapping

- Start slowly!
- Begin by using mind maps for yourself to see if they help you think more clearly. Experiment with different approaches to mapping.
- Start by using the technique in one class. Compare results with other classes.
- Teach students how to use the process and include it in group activities.
- Provide a lot of information and feedback about your mind mapping expectations.
- Spread the word! Find friends and allies to work with using this technique. Share experiences and build on group insights.